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Cecile Drogou

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02/09/2006

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EXAMINER

PATTERSON, MARC A

ART UNIT

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/053,497  
Filing Date: November 09, 2001  
Appellant(s): DROGOU ET AL.

**MAILED**

FEB 09 2006

**GROUP 1700**

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Cynthia L. Foulke  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed November 22, 2005 appealing from the Office action mailed October 1, 2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal: None.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

**(9) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 3, 21 and 30 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (U.S. Patent No. 6,207,248).

With regard to Claim 1, Yang et al disclose a process for bonding difficult – to – bond substrates (difficult substrates; column 5, lines 56 - 57) comprising bonding a first substrate to a second substrate (bonding end sheets of a book block to a book cover case in bookbinding', column 5, lines 48 - 50) with a hot - melt adhesive composition (column 5, lines 48 - 50 ); the composition is thermoplastic (column 8, line 43) and Yang et al teach that the adhesive composition comprises an adhesive component selected from a group of components which includes ethylene n - butyl acrylate copolymer (column 8, lines 66 - 67) and a tackifier selected from among a group of tackifiers which includes modified terpene (styrenated terpene; column 8, lines 31 - 34). It would therefore be obvious for one of ordinary skill in the art to select an

adhesive component comprising ethylene n - butyl acrylate copolymer and a tackifier comprising modified terpene, as ethylene n - butyl acrylate copolymer and modified terpene are among the components which are taught by Yang et al.

With regard to Claim 3, the adhesive also comprises a wax (column 9, line 21).

With regard to Claim 21, the adhesive comprises 30% by weight ethylene n - butyl acrylate (column 8, line 64), 30% by weight tackifier (column 8, lines 39 - 42) and 30% wax (column 9, lines 39 - 41).

With regard to newly submitted Claims 30 - 32, when an applicant claims that additional materials are excluded by the recitation 'consisting essentially of,' applicant has the burden of showing that the introduction of additional components would materially change the characteristics of applicant's invention. *In re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA 1964); *In re Herz*, 537 F.2d 549, 551 - 552, 190 USPQ 461, 463 (CCPA 1976,).

Claims 2 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (U.S. Patent No. 6,207,248) in view of Milks (U.S. Patent No. 5,401,791).

Yang et al disclose a process for bonding substrates in bookbinding which comprises a modified terpene comprising styrenated terpene as discussed above. Yang et al fail to disclose a modified terpene which comprises terpene phenolic.

Milks teaches that styrenated terpene and terpene phenolic are interchangeable in the bonding of substrates (suitable tackifiers include styrenated terpene and terpene phenolic; column 4, lines 12 - 20) in bookbinding (column 3, lines 35 - 37) for the purpose of obtaining a bond which has good extensibility and flexibility (column 4, lines 35 - 38). Therefore, one of

ordinary skill in the art would have recognized that the utility of a terpene phenolic instead of a styrenated terpene in Yang et al, which is a process for binding substrates in bookbinding, if a good extensibility and flexibility of the bond in the final product were desired.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for terpene phenolic instead of styrenated terpene in Yang et al in order to obtain a bond which has good extensibility and flexibility as taught by Milks.

Claims 4 - 5 and 23 - 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (U.S. Patent No. 6,207,248) in view of Dupont et al (U.S. Patent No. 5,325,781).

Yang et al disclose a process for bonding substrates as discussed above. The substrates comprise paper (column 12, lines 54 - 55). With regard to Claims 4 - 5 and 23 - 24, Yang et al fail to disclose a substrate which is treated with ultraviolet varnish.

Dupont et al teaches the treatment of paper (column 1, line 18) with ultraviolet varnish (covered with UV varnish; column 3, lines 30 - 32) for the purpose of obtaining a paper having good mechanical properties when ink is applied to the paper (column 3, lines 25 - 30). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for Yang et al, which is a paper substrate, with the ultraviolet varnish of Dupont, depending on the desired mechanical properties of ink applied to the finished paper.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for treatment with ultraviolet varnish of

Dupont et al in Yang et al in order to ensure good mechanical properties for the paper when ink is applied to the paper as taught by Dupont et al.

Claims 6 - 8 and 25 - 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (U.S. Patent No. 6,207,248) in view of Howells (U.S. Patent No. 4,566,981).

Yang et al disclose a process for bonding substrates comprising paper as discussed above. With regard to Claims 6 - 8 and 25 - 27, Yang et al fail to disclose a substrate which is fluorochemical treated and grease - resistance treated.

Howells teaches the treatment of a paper (column 1, lines 9 - 10) with a fluorochemical, for the purpose of imparting oil resistance on the paper (column 1, line 10 - 12). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for treatment of the substrate disclosed by Yang et al, which comprises paper, with the fluorochemical taught by Howells, depending on the desired oil resistance, and therefore grease - resistance of the paper as taught by Howells.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for the treatment with a fluorochemical in Yang et al in order to obtain a substrate, both paper, which is treated for grease resistance as taught by Howells.

Claims 28 - 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (U.S. Patent No. 6,207,248) in view of Gruber et al (U.S. Patent No. 5,475,080).

Yang et al disclose a process for bonding substrates comprising paper as discussed above. With regard to Claims 28 – 29, Yang et al fail to disclose a substrate which has a surface energy between 25 dyn/cm and 35 dyn/cm.

Gruber et al teach a paper (column 6, lines 17 - 18) treated with a coating which imparts to the paper a surface energy of 35 dyn/cm (column 6, lines 35 - 37) and which provides the paper with enhanced strength and water resistance (column 1, lines 23 - 25). Therefore, one of ordinary skill in the art would have recognized the utility of providing the coating of the substrate by Yang et al, which is paper, with the coating of Gruber et al, depending on the desired strength and water resistance of the end product as taught by Gruber et al.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a coating, which imparts to the substrate a surface energy of 35 dyn/cm, in Yang et al, in order to obtain a substrate with enhanced strength and water resistance as taught by Gruber et al.

#### **(11) Response to Argument**

Appellant argues that Yang et al discloses an adhesive that is a reactive hot melt adhesive rather than a thermoplastic adhesive; although Yang et al comprises thermoplastic additives, Applicant argues, Yang et al is still a reactive polyurethane hot melt adhesives.

However, as stated in the rejection, Yang et al comprises a thermoplastic composition, because column 8, line 43 comprises thermoplastic polymers; non – reactive adhesives are also not claimed, and it a reactive adhesive is not necessarily non – thermoplastic as indicated by Applicant.



Appellant also argues that Yang et al does not disclose an adhesive that consists essentially of the recited components, and that the language excludes reactive hot melt adhesives.

However, as stated above, non – reactive adhesives are not claimed; therefore, the claim language does not exclude reactive hot melt adhesives; furthermore, as stated above, when an applicant claims that additional materials are excluded by the recitation 'consisting essentially of,' applicant has the burden of showing that the introduction of additional components would materially change the characteristics of applicant's invention.

Appellant also argues that Milks also fails to cure the defect of Yang et al because Milks does not disclose an adhesive that is not a reactive hot melt adhesive.

However, as stated above, Yang et al comprises a thermoplastic composition, because column 8, line 43 comprises thermoplastic polymers; non – reactive adhesives are also not claimed, and it a reactive adhesive is not necessarily non – thermoplastic as indicated by Appellant.

Appellant also argues that Dupont et al also fails to cure the defect of Yang et al because Dupont et al does not disclose an adhesive that is not a reactive hot melt adhesive.

However, as stated above, Yang et al comprises a thermoplastic composition, because column 8, line 43 comprises thermoplastic polymers; non – reactive adhesives are also not claimed, and it a reactive adhesive is not necessarily non – thermoplastic as indicated by Appellant.

Appellant also argues that Howells also fails to cure the defect of Yang et al because Howells does not disclose an adhesive that is not a reactive hot melt adhesive.

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However, as stated above, Yang et al comprises a thermoplastic composition, because column 8, line 43 comprises thermoplastic polymers; non – reactive adhesives are also not claimed, and it a reactive adhesive is not necessarily non – thermoplastic as indicated by Appellant.

Appellant also argues that Gruber et al also fails to cure the defect of Yang et al because Gruber does not disclose an adhesive that is not a reactive hot melt adhesive.


However, as stated above, Yang et al comprises a thermoplastic composition, because column 8, line 43 comprises thermoplastic polymers; non – reactive adhesives are also not claimed, and it a reactive adhesive is not necessarily non – thermoplastic as indicated by Appellant.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

*Marc Patterson 2/6/06*  
Marc Patterson

Conferees:

Harold Pyon 

Carol Chaney

